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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,509	01/30/2004	Mihal Lazaridis	555255012690	6885

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EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 03/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/768,509

Applicant(s)

LAZARIDIS ET AL.

Examiner

James S. Wozniak

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 24-27 and 33-36** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the aforementioned claims recite an input device in the form of a touchpad, keyboard, stylus, and mouse, however the specification only refers to a broad field of known input devices (*Page 4*) and makes no mention of any of the specific input devices recited in claims 24-27 and 33-36. Thus claims 24-27 and 33-36 fail to comply with the written description requirement.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 2-4, 6-11, 14-22, 25-31, and 34-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Beauregard et al (*U.S. Patent: 5,974,413*) in view of Ramaswamy et al (*U.S. Patent: 6,622,119*).

With respect to **Claim 2**, Beauregard discloses:

Receiving an abbreviated textual command in a natural language search engine (*text input, Col. 7, Line 58- Col. 8, Line 49; command code words, Col. 15, Lines 18-58; and wordbase search, Col. 16, Line 65- Col. 17, Line 31*);

While receiving the abbreviated textual command performing the steps of:

Searching a natural language database that stores a data set of abbreviated textual commands and associated application commands (*searching a "wordbase" database containing command code words and associated service scripts, Col. 16, Line 65- Col. 17, Line 31*);

Displaying a list of probable complete commands matching the currently received portion of the abbreviated textual command (*displaying multiple commands in a window that may correspond to a entered command word, Col. 42, Lines 27-50*).

Although Beauregard teaches a means for presenting a list of probable commands to a user and further discloses recording command history information (*Col. 17, Lines 16-31*), Beauregard does not specifically suggest utilizing the history information in determining the one or more probable commands. Ramaswamy, however, recites a means for determining probable input commands that utilizes a command history (*Col. 5, Lines 19-30; and Col. 8, Lines 3-24*). Ramaswamy additionally discloses system implementation in a handheld PDA device (*Col. 3, Lines 27-38*).

Beauregard and Ramaswamy are analogous art because they are from a similar field of endeavor in natural language command systems. Thus, it would have been obvious to one of ordinary skill in the art, at the time of invention, to modify the teachings of Beauregard with the means for determining probable input commands utilizing a command history as taught by Ramaswamy in order to achieve improved natural language understanding accuracy through the use of user regularities (*Ramaswamy, Col. 1, Lines 23-33*).

With respect to **Claim 3**, Beauregard further discloses:

If a user selects a complete command from the list, then setting the complete command as the abbreviated textual command, and executing the associated application command (*selection of a displayed script command and script execution, Col. 43, Lines 1-13*).

With respect to **Claim 4**, Beauregard additionally recites:

If a user does not select a complete command from the list, then receiving an entire abbreviated textual command in the natural language search engine (*no match is found and a next action word is accepted, Col. 18, Lines 1-4*).

With respect to **Claim 6**, Ramaswamy further discloses:

The step of analyzing historical preferences is performed using a set of probability factors that are generated based on historical preferences, where the abbreviated textual command has a probable match in the data set when a probability factor associated with the probable match is greater than a predetermined value (*probabilities based on user history, Col. 5, Lines 19-45; Col. 6, Lines 11-28; and probability threshold, Col. 8, Lines 3-24*).

With respect to **Claim 7**, Ramaswamy further discloses:

The predetermined value is defined by a user (*predetermined threshold that would inherently be set by some type of user, Col. 8, Lines 3-24*).

With respect to **Claim 8**, Ramaswamy additionally recites:

Adjusting the set of probability factors each time the abbreviated textual command is entered into the hand-held device (*using input commands to adapt command prediction for a particular user, Col. 3, Lines 14-26; Col. 9, Lines 9-31*).

With respect to **Claim 9**, Beauregard further discloses:

The abbreviated textual command has a first component and a second component, wherein the first component represents a desired application command, and the second component represents a desired application tag (text command and application identifying tag, Col. 11, Lines 18-26); and

The natural language database stores a data set of abbreviated textual commands and associated application commands and tags (*database storing command text and application tags, Col. 34, Lines 8-18*).

With respect to **Claim 10**, Beauregard further discloses:

The abbreviated textual command is entered into a graphical dialog box (*action box, Col. 27, Line 66- Col. 28, Line 9*).

With respect to **Claim 11**, Beauregard further discloses:

The natural language search engine can receive the abbreviated textual command while any of the software applications are executing (*Col. 10, Lines 3-8*).

With respect to **Claim 14**, Beauregard in view of Ramaswamy et al teaches the software application launching method utilizing history information, as applied to Claim 2. Also, Beauregard further discloses:

A plurality of software applications (*computer applications, Col. 7, Line 58- Col. 8, Line 27*);

An input device (*Col. 8, Lines 28-39*);

A natural language search engine operable to receive a two-part keystroke combination from the input device, the two-part keystroke combination having a first component and a second component (*receiving any number of keystrokes as a natural language input wherein a two part keystroke would be within the scope of the teachings of Beauregard based on a desired user codeword, Col. 8, Lines 50-63 and Col. 9, Lines 61-63; "wordbase" database containing command code words and associated service scripts, Col. 16, Line 65- Col. 17, Line 31; and text command and application identifying tag, Col. 11, Lines 18-26*); and

The natural language search engine being further operable to match the first component with a desired application command, match the second component with a desired application tag (*searching a database using a text command and application tag, Col. 11, Lines 18-26*), execute the desired application command (*command execution, Col. 8, Line 64- Col. 9, Line 4*), and retrieve data associated with the application command using the desired application tag (*service script retrieval, Col. 17, Lines 16-31*).

With respect to **Claim 15**, Beauregard further discloses:

Executing the application command launches a software application (*launching application programs, Col. 8, Line 64- Col. 9, Line 4*).

With respect to **Claim 16**, Beauregard further discloses:

A natural language database configured to store a data set of keystroke combinations and associated application commands, the natural language database being used by the natural language search engine to match the keystroke combination with the desired application command (*action words stored in a "wordbase" database that is searched for a matching command, Col. 16, Line 65- Col. 17, Line 31*).

With respect to **Claim 17**, Ramaswamy teaches command probability based on a user history, as applied to Claim 2.

Claim 18 contains subject matter similar to Claim 11, and thus, is rejected for the same reasons.

Claim 19 contains subject matter similar to Claim 10, and thus, is rejected for the same reasons.

With respect to **Claim 20**, Beauregard shows:

A home screen that is a graphical interface between a user and the natural language search engine (*interface, Fig. 14; and a desktop environment featuring the interface, Fig. 16*).

With respect to **Claim 21**, Beauregard discloses:

The home screen includes an icon ribbon having a plurality of icons, and wherein the user may launch one of the software applications by either selecting one of the icons or entering a keystroke combination (*desktop environment having a plurality of icons, Fig. 16; and launching application programs, Col. 8, Line 64- Col. 9, Line 4*).

With respect to **Claim 22**, Beauregard discloses:

Presenting the user with a list of likely command choices (*displaying multiple commands in a window that may correspond to a entered command word, Col. 42, Lines 27-50*).

With respect to **Claim 25**, Beauregard discloses:

The input device is a keyboard (*Col. 8, Lines 28-39*).

With respect to **Claim 26**, Ramaswamy discloses:

The input device is a stylus (*handwritten input that would inherently require the use of a stylus device, Col. 3, Lines 27-38*).

With respect to **Claim 27**, Ramaswamy discloses:

The input device is a mouse (*mouse click input, Col. 3, Lines 27-38*).

With respect to **Claim 28**, Beauregard in view of Ramaswamy et al teaches the software application launching method and system utilizing command history information, as applied to Claim 14. Also, Beauregard further discloses:

Displaying an icon ribbon having a plurality of icons on the graphical input device (Fig. 16); and

If a user selects one of the icons via the graphical input device, then executing an application command associated with the icon (*computer desktop environment, Fig. 16; and launching an application with a mouse click, Col. 5, Lines 41-56*).

Claims 29-31 contain subject matter similar to claims 9-11, respectively, and thus, are rejected for the same reasons.

Claim 34 contains subject matter similar to Claim 27, and thus, is rejected for the same reasons.

Claim 35 contains subject matter similar to Claim 26, and thus, is rejected for the same reasons.

Claim 36 contains subject matter similar to Claim 25, and thus, is rejected for the same reasons.

5. **Claims 5 and 12-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Beauregard et al (*U.S. Patent: 5,974,413*) in view of Ramaswamy et al (*U.S. Patent: 6,622,119*), and further in view of Vanbuskirk et al (*U.S. Patent: 6,327,566*).

With respect to **Claim 5**, Beauregard in view of Ramaswamy et al teaches the software application launching method utilizing history information, as applied to Claim 2. Also, Beauregard further discloses:

If the abbreviated textual command has an exact match in the data set, then setting the exact match as a user command (*exact match found and service script is executed, Col. 17, Lines 36-38*); and

Executing the user command (*launching application programs, Col. 8, Line 64- Col. 9, Line 4*).

Beauregard also teaches a means for presenting multiple candidate matches (*Col. 42, Lines 27-50*).

While Ramaswamy additionally recites:

If the abbreviated textual command does not have an exact match in the data set, then analyzing historical preferences to determine if the abbreviated textual command has a probable

match in the data set (*determining a match probability according to a command history, Col. 8, Lines 3-24*); and

If the abbreviated textual command has a probable match in the data set, then setting the probable match as the user command (*accepting a probable match as a user command, Col. 5, Lines 31-45*).

Beauregard in view of Ramaswamy does not teach steps for presenting a list of possible commands and selecting a command from the list when an input command does not have a probable match in a data set, however Vanbuskirk discloses a means for presenting alternate commands if a user input command is unknown (*Col. 6, Lines 15-29*).

Beauregard, Ramaswamy, and Vanbuskirk are analogous art because they are from a similar field of endeavor in natural language command systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Beauregard in view of Ramaswamy with the means for presenting alternative commands as taught by Vanbuskirk in order to implement quick command error correction that does not require typing (*Vanbuskirk, Col. 2, Lines 63-67*).

With respect to **Claim 12**, Vanbuskirk teaches presenting a list of alternative commands if an input command is unrecognized (*Col. 6, Lines 15-28*), while Ramaswamy teaches considering the most recent commands in determining a most likely input command (*Col. 1, Lines 47-65*).

With respect to **Claim 13**, Vanbuskirk further discloses:

The list of possible commands includes a set of generic application commands (*known alternative commands, Col. 6, Lines 15-28*).

6. **Claims 23 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Beauregard et al (*U.S. Patent: 5,974,413*) in view of Ramaswamy et al (*U.S. Patent: 6,622,119*), and further in view of Will (*U.S. Patent: 5,479,408*).

With respect to **Claim 23**, Beauregard in view of Ramaswamy et al teaches the software application launching method utilizing command history information, as applied to Claim 14. Beauregard in view of Ramaswamy does not teach the use of a trackwheel input device, however Will teaches the use of such an input device (*thumbwheel, Col. 3, Lines 1-16*).

Beauregard, Ramaswamy, and Will are analogous art because they are from a similar field of endeavor in text processing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Beauregard in view of Ramaswamy with the thumbwheel input device taught by Will in order to increase the ease of interaction with a text processing system (*Will, Col. 3, Lines 1-16*).

Claim 32 contains subject matter similar to Claim 23, and thus, is rejected for the same reasons.

7. **Claims 24 and 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Beauregard et al (*U.S. Patent: 5,974,413*) in view of Ramaswamy et al (*U.S. Patent: 6,622,119*), and further in view of Hachamovitch et al (*U.S. Patent: 6,377,965*).

With respect to **Claim 24**, Beauregard in view of Ramaswamy et al teaches the software application launching method utilizing command history information, as applied to Claim 14. Beauregard in view of Ramaswamy does not teach the use of a touchpad input device, however Hachamovitch discloses the use of such an input device (*touch screen, Col. 1, Lines 12-25*).

Beauregard, Ramaswamy, and Hachamovitch are analogous art because they are from a similar field of endeavor in text processing systems. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Beauregard in view of Ramaswamy with the touch screen input device taught by Hachamovitch in order to implement an alternative means for entering text commands (*Hachamovitch, Col. 1, Lines 12-25*).

Claim 33 contains subject matter similar to Claim 24, and thus, is rejected for the same reasons.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Lundeby (*U.S. Patent: 5,611,044*)- teaches a command shell that utilizes user commands to launch software programs.

Thompson-Rohrlich (*U.S. Patent: 5,677,710*)- discloses the use of two keystroke commands.

Cordell (*U.S. Patent: 6,031,989*)- teaches a system for inputting text commands in an MS-DOS format.

Comerford et al (*U.S. Patent: 6,513,009*)- discloses an application launching command including command and application names.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached at (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
3/14/2006

U. Paul Harper
Patent Examiner
Art Unit 2626